

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/601,896	BORDEN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Kimbinh T. Nguyen	2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to amendment filed 03/27/2006.
2.  The allowed claim(s) is/are 2-8, 13-18 and 21-35.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is responsive to amendment filed 03/27/06.
2. Claims 2-8, 13-18, 21-35 are allowed.

#### ***Drawings***

3. The drawings were received on 03/27/2006. These drawings are Figs. 1A, 1B, 2A, 2B, 3 and 4.

#### ***Allowable Subject Matter***

4. The following is an examiner's statement of reasons for allowance:

Claims 2, 13, 21, the prior art does not teach selecting a first hexahedron, the selected hexahedron having a first and second opposing faces; selecting the first neighboring hexahedron; determining a first neighboring hexahedron; determining a second neighboring hexahedron; grouping all selected hexahedrons into a first column of hexahedrons; repeating the steps until the sheet edge threshold being satisfied; grouping all columns of hexahedron into the sheet; determining a group of hexahedron within the sheet to refine; shrinking the group; inserting a new sheet of hexahedrons into the hexahedral volume mesh; separating each hexahedron in the group from the hexahedral volume mesh to form a void; inserting a new sheet of hexahedrons into the void.

Claims 23-31, the prior art does not teach inserting a volume into a hexahedral volume mesh forming an intersection, moving nodes in the hexahedral mesh to surface of intersection with the volume; inserting a layer of elements on each side of the volume; and removing the volume; forming a void between said plurality of hexahedral

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elements and said mesh; inserting a new sheet of hexahedral elements into said void to produce a modified form of said volume mesh.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

May 15 2006

*Kimberly T. Nguyen*  
KIMBERLY T. NGUYEN  
PRIMARY EXAMINER